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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PIZIALI, ANDREW T

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/719,813

Applicant(s)

TERMONIA ET AL.

Examiner

Andrew T. Piziali

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4,5,9 and 12-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-8,10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/17/2006 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6-8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 11-158733 to Aranaga et al. (hereinafter referred to as Aranaga) in view of USPN 4,038,452 to Kobayashi et al. (hereinafter referred to as Kobayashi).

Regarding claim 1-3, 6-8 and 10-11, Aranaga discloses a non-woven fabric comprising a plurality of entangled helically crimped asymmetric bicomponent fibers comprising a first crystallizable polyester component (poly(ethylene terephthalate) and a second crystallizable polyester component (poly(propylene terephthalate), said first crystallizable polyester component exhibiting a lower rate of crystallization than said second crystallizable polyester component,

Art Unit: 1771

said fibers being characterized by a denier range of 0.5 to 6 denier (see entire document including Patent Abstract and claim 2).

Aranaga is silent with regards to the orientation of the fibers, the number of crimps per inch, the crimp radius of curvature, and the bulk density of the nonwoven fabric, therefore, it would have been necessary and thus obvious to look to the prior art for the conventional orientation of fibers, number of crimps per inch, crimp radius of curvature, and nonwoven fabric bulk density. Kobayashi provides this conventional teaching showing that it is known in the nonwoven crimp fiber art (column 1, lines 4-11) to orient the fibers in a well-defined plane (see Figure 1), to use fibers with 20 to 80 crimps per inch (column 2, lines 45-61), to use a radius of curvature of below 1.5 mm (column 2, line 45 through column 3, line 5), and to use a bulk density of between 0.05 to 0.25 g/cm³ (column 2, lines 9-19 and column 8, lines 35-38). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to orient the fibers of Aranaga in a well-defined plane, to use fibers with 20 to 80 crimps per inch (column 2, lines 45-61), to use a radius of curvature of below 1.5 mm (column 2, line 45 through column 3, line 5), and to use a bulk density of between 0.05 to 0.25 g/cm³, motivated by the expectation of successfully practicing the invention of Aranaga.

Regarding claim 2 and 11, Aranaga discloses that the fibers may be side-by-side fibers (Patent Abstract).

Regarding claims 3, 7-8 and 11, Aranaga discloses that the first crystallizable polyester component may be (poly(ethylene terephthalate) and that the second crystallizable polyester component may be (poly(propylene terephthalate) (Patent Abstract).

Art Unit: 1771

Regarding claims 6-8 and 11, Aranaga discloses that the fibers may be staple fibers (Patent Abstract).

Regarding claims 7-8 and 11, Aranaga discloses that the concentration ratio may be in the range of 70:30 to 30:70 (Patent Abstract). Aranaga specifically mentions a concentration ratio in the range of 60:40 to 40:60 (see Detailed Description).

Regarding claims 10 and 11, Aranaga does not specifically mention the Young's modulus or the ultimate stretch, but considering that the nonwoven fabric taught by the applied prior art is substantially identical to the claimed nonwoven (same side-by-side bicomponent fibers, same fiber density, same number of crimps per inch, same crimp radius of curvature, and same bulk density), it appears that the nonwoven fabric inherently possesses the claimed Young's modulus and ultimate stretch.

The Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977).

Regarding claim 11, Aranaga discloses that the fibers may have an uncrimped length in the range of 2 to 100 mm (Patent Abstract).

Response to Arguments

4. Applicant's arguments filed 7/17/2006 have been fully considered but they are not persuasive.

The applicant asserts that the applied prior art fails to teach or suggest the claimed bulk density. The examiner respectfully disagrees. Aranaga is silent with regards to the bulk density of the nonwoven fabric, therefore, it would have been necessary and thus obvious to look to the prior art for the conventional nonwoven fabric bulk density. Kobayashi provides this conventional teaching showing that it is known in the nonwoven crimp fiber art (column 1, lines 4-11) to use a bulk density of between 0.05 to 0.25 g/cm³ (column 2, lines 9-19 and column 8, lines 35-38). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a bulk density of between 0.05 to 0.25 g/cm³, motivated by the expectation of successfully practicing the invention of Aranaga.

In response, the applicant asserts that it is not appropriate to use the density disclosed by Kobayashi because that the fibers of Kobayashi are made of acrylonitrile, while the fibers of Aranaga are made of polyester. The applicant asserts, "Density is a characteristic of a fiber which depends, in part, on the composition of the polymer itself." The examiner respectfully disagrees with applicant's logic. The density referred to by Kobayashi (column 2, lines 9-19 and column 8, lines 35-38) is the density of the fabric, not the density of the fibers of the fabric. Therefore, Kobayashi discloses that it is known in the nonwoven crimp fiber art to use a nonwoven fabric bulk density of between 0.05 to 0.25 g/cm³.

The applicant asserts that Kobayashi fails to teach or suggest fibers predominately

Art Unit: 1771

oriented in a "well-defined plane" because Kobayashi allegedly does not control the thickness of the fabric. The examiner respectfully disagrees. Kobayashi clearly discloses that the fabric possesses "uniformity in surface density and flatness" (column 5, lines 13-17). Even the paragraph cited by the applicant explains that the shrinkage must be at least 10% otherwise the resulting web possesses poor surface flatness (column 7, lines 56-68).

The applicant asserts that no motivation exists to combine the references. The examiner respectfully disagrees. Aranaga is silent with regards to the orientation of the fibers, the number of crimps per inch, the crimp radius of curvature, and the bulk density of the nonwoven fabric, therefore, it would have been necessary and thus obvious to look to the prior art for the conventional orientation of fibers, number of crimps per inch, crimp radius of curvature, and nonwoven fabric bulk density. Kobayashi provides this conventional teaching showing that it is known in the nonwoven crimp fiber art to orient the fibers in a well-defined plane, to use fibers with 20 to 80 crimps per inch, to use a radius of curvature of below 1.5 mm, and to use a bulk density of between 0.05 to 0.25 g/cm³. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to orient the fibers of Aranaga in a well-defined plane, to use fibers with 20 to 80 crimps per inch, to use a radius of curvature of below 1.5 mm, and to use a bulk density of between 0.05 to 0.25 g/cm³, motivated by the expectation of successfully practicing the invention of Aranaga.

In response, the applicant asserts that this motivation is hindsight reconstruction. The examiner respectfully disagrees. The applicant appears to be asserting that one skilled in the art would not be motivated to successfully practice the invention of Aranaga, but the applicant has failed to show, or attempt to show, why one skilled in the art would not be motivated to

Art Unit: 1771

successfully practice the invention of Aranaga. Applicant's argument is without merit because it is well settled that unsupported arguments are no substitute for objective evidence. In re Pearson, 494 F.2d 1399, 1405, 181 USPQ 641, 646 (CCPA 1974).

The applicant asserts that a *prima facie* case of obviousness has not been established by Aranaga in view of Kobayashi because Kobayashi discloses that any outer mechanical force which restricts dimensional change should not be given. The examiner respectfully disagrees. Although the current specification mentions the use of force to restrict expansion during the process of crimp development, the current claims do not require the use of said process. Regardless of the process used by the current applicant to make the currently claimed product, the applied prior art teaches the claimed product. It is noted that the applicant has failed to show, or attempt to show, that the product taught by the applied prior art is patentably distinct from the claimed product.

Conclusion

5. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1771

6. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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ANDREW T. PIZALI
PATENT EXAMINER